



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,602	06/25/2003	Mutsuko Kondo	500.42890X00	8279
24956 7590 08/29/2008 MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			EXAMINER CAO, DIEM K	
			ART UNIT 2194	PAPER NUMBER
			MAIL DATE 08/29/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/602,602	Applicant(s) KONDO ET AL.	
	Examiner DIEM K. CAO	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-6,9 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4-6,9 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 2, 4-6, 9 and 12-14 are pending. Applicant has amended claims 2, 4-6, and 9, canceled claims 1, 3, 7-8, 10-11 and added new claims 12-14.

Specification

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See pages 1, 2, 8 and 9.

See MPEP § 608.01.

Although the remarks indicated that a Substitute Specification is being prepared and will be filed once completed, the Office has not received it as of the date that prepared this action, therefore, the rejection is maintained.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 4-6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "said second computer" in page 3, line 17. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (U.S. 2003/0105837 A1) in view of Sundsted (JNDI Overview, Part 1-4) further in view of Lindholm (U.S. 6,108,754).

As to claim 2, Kamen teaches a distributed object controlling method for a first computer for executing an object and having second reference-information storage area, comprising the steps of:

- storing, when executing an object in said first computer, object reference-information for the object in the second reference-information storage area (the client runtime 24 also stores a reference to the newly-created proxy instance in the client cache; page 4, paragraph [0032] and page 3, paragraph [0026]), and judging, when executing a retrieval request of another object, whether or not object reference information on the another object has been stored in the second reference-information storage area (When the client ... enterprise bean 6 ... checks if the instance of the proxy 26 exists in the client cache; page 3, paragraph [0032]),
- executing, when the object reference information on the another object has been stored in the second reference-information storage area, communication with the another object

- based on the object reference information of another object (When the client 8 invokes ... to the client 6; page 4, paragraphs [0033-0035] and page 2, paragraphs [0009]-[0011]),
- sending, when the object reference information on the another object has not been stored in the second reference-information storage area, a retrieval request to a second computer for providing a naming service (The client 8 ... JNDI 18 ... Enterprise bean 6; page 2, paragraphs [0009-0010] and the client runtime 24 uses the EJBHome interface ... proxy instance; page 4, paragraph [0032]),
 - storing object reference information and an object name of the object into the second reference-information storage area, the object reference information being acquired as the response to the retrieval request (the client runtime 24 also stores a reference to the newly-created proxy instance in the client cache; page 4, paragraph [0032]), and
 - executing communication with the another object based on the acquired object reference information (client 8 invokes operations ... interface 14; page 2, paragraph [0011] and At runtime, the client ... enterprise bean 6; page 3, paragraph [0031]).

Kamen does not teach the computer having a first reference-information storage areas, judging, when the object reference information on the another object has not been stored on the second reference-information storage area, whether or not object reference information on the another object has not been stored in the first reference-information storage area, executing, when the object reference information on the another object has been stored in the first reference-information storage area, communication with the another object based on the object reference information on the another object stored in the first reference information storage area, sending a retrieval request to the second computer when the object reference information on the

Art Unit: 2194

another object has not been stored in the first reference-information storage area, the retrieval request including the object name of the object, and storing the object reference information and an object name of the another object in response to the retrieval request.

However, Sundsted teaches the retrieval request including the object name of the object (A naming service ... locate object by name; Part 1, page 2, section 'An introduction to naming service'). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Sundsted to the system of Kamen because Sundsted provides details as how to use the JNDI service to locate object in the system.

Lindholm teaches when a thread invokes a synchronized method of object, in response to the request, a second reference-information storage area is searched for the object reference information, and if the object reference information is not stored in the second reference-information storage area, a first reference-information storage are is searched for the object reference information (col. 11, line 61 – col. 13, line 7), and the requested operation is performed on the object (col. 13, lines 39-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Lindholm to the system of Kamen because Lindholm teaches storing object reference in two levels, local/thread level, and application/global level would improve the performance of the system by reducing the search time.

As to claim 12, it is the same as the method claim of claim 2 except this is a computer product claim and is rejected under the same ground of rejection.

7. Claims 4-6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (U.S. 2003/0105837 A1) in view of Sundsted (JNDI Overview, Part 1-4) and Lindholm (U.S. 6,108,754) further in view of Zhao et al. (U.S. 2002/0099970 A1).

As to claim 4, Kamen, Sundsted and Lindholm do not teach if failure information has been acquired as the response to the communication with the another object based on the acquired object reference information, deleting all of object names and object reference information stored in the first reference-information storage area. However, Zhao teaches if failure information has been acquired as the response to the to the communication with the another object based on the acquired object reference information, deleting all of object names and object reference information stored in the first reference-information storage area (page 3, paragraph 36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Zhao to the system of Kamen, Lindholm and Sundsted because Zhao teaches a method for transparent failover among object references in the system (abstract).

As to claim 5, see rejection of claim 4 above.

As to claim 6, see rejection of claim 4 above. Although Zhao does not explicitly teach the failure information including an object name that has caused a failure, it is obvious that the failure information should include the object name so the interceptor can use it to connect to other server (page 3, paragraph 36).

As to claims 13 and 14, see rejections of claims 4 and 5 above.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (U.S. 2003/0105837 A1) in view of Sundsted (JNDI Overview, Part 1-4) and Lindholm (U.S. 6,108,754) further in view of Bortvedt (Functional Specification for Object Caching Service for Java, 2.0).

As to claim 9, Kamen as modified does not teach the limitations of this claim. However, Bortvedt teaches

when storing the acquired object reference information and the object name into the first reference-information storage area, storing the object name therein after registration point-in-time has been brought into corresponding with the object name (Each object in the cache ... Time to Live; page 6, section 2.1.2),

when a first predetermined time has elapsed (When an application ... object; page 4, last paragraph),

judging whether or not each registration point-in-time has elapsed by a second predetermined time, the each registration point-in-time being stored after having been brought into correspondence with the each object stored in the first reference-information storage area (Idle time; page 7, and page 4), and

deleting, from within the first reference-information storage area, an object name and object reference information whose registration point-in-time has elapsed by the second predetermined time (invalidate by the cache; page 4, last paragraph).

Although Bortvedt does not explicitly teach sending a retrieval request to the second computer for providing the naming service, the retrieval request including the object name, and storing, into the first reference information storage area, object reference information, the object name, and a registration point-in-time acquired as the response to the retrieval request, Bortvedt teaches the object reference can be updated (page 4). It would have been obvious to one of ordinary skill in the art that the Bortvedt can be modified to update the object after deleting the one in the cache or request for the same object again when the object is requested by the client.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Bortvedt to the system of Kamen because Bortvedt provides a method that allows applications to share objects across requests, across users and coordinates the life cycle of the objects across processes (page 3).

Response to Arguments

9. Applicant's arguments with respect to claims 2, 4-6, 9 and 12-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEM K. CAO whose telephone number is (571)272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2194

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

DC
August 27, 2008